



May 03, 2016

Meagan E. Ormand Golder Associates Inc. 2108 W. Laburnum Ave. Suite 200 Richmond, VA 23227

RE: Project: Bremo Monthly Process Pace Project No.: 92295907

Dear Meagan Ormand:

Enclosed are the analytical results for sample(s) received by the laboratory on May 02, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole Gasiorowski

Micolo Yasiorovske

nicole.gasiorowski@pacelabs.com

Project Manager

Enclosures





(704)875-9092

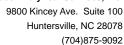


May 03, 2016 Page 2

cc: Ron DiFrancesco, Golder Associates Inc. Mike Williams, Golder Associates Inc



REPORT OF LABORATORY ANALYSIS





CERTIFICATIONS

Project: Bremo Monthly Process

Pace Project No.: 92295907

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174

Alabama Certification #: 41320 Connecticut Certification #: PH-0216

Delaware Certification: FL NELAC Reciprocity

Florida Certification #: E83079 Georgia Certification #: 955

Guam Certification: FL NELAC Reciprocity Hawaii Certification: FL NELAC Reciprocity

Illinois Certification #: 200068

Indiana Certification: FL NELAC Reciprocity

Kansas Certification #: E-10383

Louisiana Certification #: FL NELAC Reciprocity Louisiana Environmental Certificate #: 05007

Maryland Certification: #346 Michigan Certification #: 9911

Mississippi Certification: FL NELAC Reciprocity

Missouri Certification #: 236 Montana Certification #: Cert 0074 Nebraska Certification: NE-OS-28-14 Nevada Certification: FL NELAC Reciprocity

New York Certification #: 11608

North Carolina Environmental Certificate #: 667

North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity

US Virgin Islands Certification: FL NELAC Reciprocity

Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity

West Virginia Certification #: 9962C Wisconsin Certification #: 399079670

Wyoming (EPA Region 8): FL NELAC Reciprocity

REPORT OF LABORATORY ANALYSIS





SAMPLE ANALYTE COUNT

Project: Bremo Monthly Process

Pace Project No.: 92295907

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92295907001	T3-160502-1100-S3	EPA 200.7	CKJ	8	PASI-O
92295907002	T4-160502-1135-S3	EPA 200.7	CKJ	8	PASI-O

REPORT OF LABORATORY ANALYSIS



PROJECT NARRATIVE

Project: Bremo Monthly Process

Pace Project No.: 92295907

Method: EPA 200.7
Description: 200.7 MET ICP

Client: Golder_Dominion_Bremo

Date: May 03, 2016

General Information:

2 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

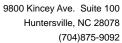
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





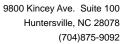
ANALYTICAL RESULTS

Project: Bremo Monthly Process

Pace Project No.: 92295907

Date: 05/03/2016 07:17 PM

Sample: T3-160502-1100-S3	Lab ID: 9229	95907001	Collected: 05/02/1	16 11:00	Received: 05	5/02/16 13:48 N	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Meth	od: EPA 20	0.7 Preparation Met	thod: El	PA 200.7			
Aluminum	297	ug/L	100	1	05/03/16 12:30	05/03/16 18:08	7429-90-5	
Barium	151	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:08	7440-39-3	
Beryllium	ND	ug/L	1.0	1	05/03/16 12:30	05/03/16 18:08	7440-41-7	
Boron	377	ug/L	50.0	1	05/03/16 12:30	05/03/16 18:08	7440-42-8	
Cobalt	ND	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:08	7440-48-4	
Iron	ND	ug/L	250	1	05/03/16 12:30	05/03/16 18:08	7439-89-6	
Molybdenum	85.1	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:08	7439-98-7	
Vanadium	13.6	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:08	7440-62-2	





ANALYTICAL RESULTS

Project: Bremo Monthly Process

Pace Project No.: 92295907

Date: 05/03/2016 07:17 PM

Sample: T4-160502-1135-S3	Lab ID: 9229	5907002	Collected: 05/02/1	6 11:35	Received: 05	5/02/16 13:48 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Meth	od: EPA 20	0.7 Preparation Met	hod: El	PA 200.7			
Aluminum	286	ug/L	100	1	05/03/16 12:30	05/03/16 18:12	7429-90-5	
Barium	210	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:12	7440-39-3	
Beryllium	ND	ug/L	1.0	1	05/03/16 12:30	05/03/16 18:12	7440-41-7	
Boron	414	ug/L	50.0	1	05/03/16 12:30	05/03/16 18:12	7440-42-8	
Cobalt	ND	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:12	7440-48-4	
Iron	ND	ug/L	250	1	05/03/16 12:30	05/03/16 18:12	7439-89-6	
Molybdenum	137	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:12	7439-98-7	
Vanadium	26.7	ug/L	10.0	1	05/03/16 12:30	05/03/16 18:12	7440-62-2	



QUALITY CONTROL DATA

Project: Bremo Monthly Process

Pace Project No.: 92295907

Date: 05/03/2016 07:17 PM

QC Batch: MPRP/30190 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 MET

Associated Lab Samples: 92295907001, 92295907002

METHOD BLANK: 1560477 Matrix: Water

Associated Lab Samples: 92295907001, 92295907002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	100	05/03/16 17:25	
Barium	ug/L	ND	10.0	05/03/16 17:25	
Beryllium	ug/L	ND	1.0	05/03/16 17:25	
Boron	ug/L	ND	50.0	05/03/16 17:25	
Cobalt	ug/L	ND	10.0	05/03/16 17:25	
Iron	ug/L	ND	250	05/03/16 17:25	
Molybdenum	ug/L	ND	10.0	05/03/16 17:25	
Vanadium	ug/L	ND	10.0	05/03/16 17:25	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	2500	2460	98	85-115	
Barium	ug/L	250	253	101	85-115	
Beryllium	ug/L	25	24.7	99	85-115	
Boron	ug/L	2500	2450	98	85-115	
Cobalt	ug/L	250	259	104	85-115	
Iron	ug/L	2500	2440	98	85-115	
Molybdenum	ug/L	250	255	102	85-115	
Vanadium	ug/L	250	248	99	85-115	

MATRIX SPIKE & MATRIX SPIR	KE DUPLICAT	E: 15604	79		1560480						
			MS	MSD							
	922	95910001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Aluminum	ug/L	4060	2500	2500	6640	6750	103	107	70-130	2	
Barium	ug/L	ND	250	250	258	258	102	102	70-130	0	
Beryllium	ug/L	ND	25	25	25.3	26.4	100	105	70-130	4	
Boron	ug/L	51.2	2500	2500	2570	2670	101	105	70-130	4	
Cobalt	ug/L	ND	250	250	256	254	102	101	70-130	1	
Iron	ug/L	385	2500	2500	2870	2920	99	101	70-130	2	
Molybdenum	ug/L	10.3	250	250	261	257	100	99	70-130	2	
Vanadium	ug/L	ND	250	250	253	254	100	101	70-130	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Bremo Monthly Process

Pace Project No.: 92295907

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether, Styrene, and Vinyl chloride.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

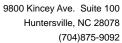
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

Date: 05/03/2016 07:17 PM

PASI-O Pace Analytical Services - Ormond Beach





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo Monthly Process

Pace Project No.: 92295907

Date: 05/03/2016 07:17 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92295907001	T3-160502-1100-S3	EPA 200.7	MPRP/30190	EPA 200.7	ICP/18034
92295907002	T4-160502-1135-S3	EPA 200.7	MPRP/30190	EPA 200.7	ICP/18034

Pace Analytical*

Document Name:

Sample Condition Upon Receipt(SCUR)

Document No.: F-MEC-CS-009-rev.02 Document Revised: 26FEB2016 Page 1 of 2

Issuing Authority: Pace Mechanicsville Quality Office

Sample Corr dition Upon Client Name:				Page 2 of 2 for Internal Use ONLY
Receipt	-1 B	VPV	20	Project #: WO#: 92295907
Courier: Fed Ex UPS	, U:	SPS	VIO	
☐ Commer c ial ☐ Pace	□ot	ther:		92295907
Custody Seal Present? Yes No Sea	als Intact?		res	No
Packing Material: Bubble Wrap	Bubble Bags	M	None	Date/Initials Person Examining Contents 5-2 Och
Thermometer: RMD001	-	of Ice:	₩et	Blue None Samples on ice, cooling process has begur
Correction Factor: 0.0°C Cooler Temp Corrected (77	Biological Tissue Frozen? Yes No N/A
Temp should be above freezing to 6°C USDA Regulated Soil (□ N/A, water sample)				
Did samples or iginate in a quarantine zone within the Unit	ed States: C	A. NY. or	SC (check	maps)? Did samples originate from a foreign source (internationally,
Yes No				including Hawaii and Puerto Rico)? Yes No
Chain of Custo dy Present?				COMMENTS:
Chain of Custody Present? Chain of Custody Filled Out?	Yes	□No	□N/A	1.
Chain of Custody Filled Out? Chain of Custody Relinquished?	Yes	□No	□N/A	2.
	¥Yes	□No	□N/A	3.
Sampler Name and/or Signature on COC?	✓Yes	□No	□N/A	4.
Samples Arrived within Hold Time?	Yes	No	□N/A	5.
Short Hold Time Analysis (<72 hr)?	Yes	No	□N/A	6.
Rush Turn Around Time Requested?	Yes	□No	□N/A	7.
Sufficient Volume?	Yes	□No	□N/A	8.
Correct Containers Used?	¥Yes	□ _{No}	□N/A	9.
-Pace Containers Used?	Yes	No	□N/A	
Containers Intact?	Yes	□No	□N/A	10.
Filtered Volume Received for Dissolved Tests?	Yes	□No	N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	Yes	□No	□n/a	12.
-Includes Date/Time/ID/Analysis Matrix: WW All containers needing acid/base preservation have been				
checked?	Yes	□No	□n/a	13.
All containers needing preservation are found to be in			U11/A	
compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	Yes	Пы		
Exceptions: VOA, Coliform, TOC, Oil and Grease,	[<u>A</u>] 163	□No	□N/A	
DRO/8015 (water) DOC,LLHg	□Yes	□No	□N/A	
Samples checked for dechlorination	, _Yes	□No	N/A	14.
Headspace in VOA Vials (>5-6mm)? Trip Blank Present?	Yes	□No	UN/A	15.
Trip Blank Custody Seals Present?	□Yes	□No	N/A	16.
Pace Trip Blank Lot # (if purchased):	∐Yes	□No	₩ N/A	
CLIENT NOTIFICATION/RESOLUTION				Field Data Required? Yes No
			9*8	Held para kedulted: Tives Tivo
Person Contacted:				Date/Time:
Comments/Resolution:				
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Project Manager SCURF Review:)			Date: 5/2/16
Project Manager SRF Review:	.6			Date: 5/2/11/2
Note: Whenever there is a discrepancy affecting North Carolin	a compliance	e samples	s, a copy o	f this form will be sent to the North Carolina DEHNR Certification Office (i.e.
Out of hold, incorrect preservative, out of temp, incorrect cont	ainers)			

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Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

ANALYTICAL RESULTS

Prepared by:

Prepared for:

Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601 Pace Analytical Services Suite 100 9800 Kincey Ave Huntersville NC 28078

Report Date: May 03, 2016

Project: 92295907

Submittal Date: 05/03/2016 Group Number: 1656360 PO Number: NMG 15369 State of Sample Origin: VA

 Client Sample Description
 (LL) #

 T3-160502-1100-S3 Water
 8360691

 T4-160502-1135-S3 Water
 8360692

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/.

Electronic Copy To Pace Analytical Services Attn: Nicole Gasiorowski

Respectfully Submitted,

Bonnie Stadelmann Senior Project Manager

Bornie Stadelmann

(312) 590-3133



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: T3-160502-1100-S3 Water

9225907001 92295907

LL Sample # WW 8360691 LL Group # 1656360 Account # 10945

1

Project Name: 92295907

Submitted: 05/03/2016 09:30

Reported: 05/03/2016 17:07

Collected: 05/02/2016 11:00 Pace Analytical Services

Suite 100

9800 Kincey Ave

Huntersville NC 28078

CAT Dilution Limit of Analysis Name CAS Number Result No. Factor Quantitation

mg/l OIA-1677-09 ma/1Wet Chemistry 12941 Free Cyanide < 10.0 10.0 n.a.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution			
No.					Date and Time		Factor			
12941	Free Cyanide	OIA-1677-09	1	16124941101A	05/03/2016 15:23	Brianna A White	1			



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: T4-160502-1135-S3 Water

9225907002 92295907

LL Sample # WW 8360692 LL Group # 1656360 Account # 10945

1

Project Name: 92295907

Collected: 05/02/2016 11:35 Pace Analytical Services

Suite 100

9800 Kincey Ave

Submitted: 05/03/2016 09:30 Reported: 05/03/2016 17:07

Huntersville NC 28078

CAT Dilution Limit of Analysis Name CAS Number Result No. Factor Quantitation

mg/l OIA-1677-09 ma/1Wet Chemistry 12941 Free Cyanide < 10.0 10.0 n.a.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

Method CAT Analysis Name Trial# Batch# Analyst Dilution No. Date and Time Factor 12941 Free Cyanide OIA-1677-09 16124941101A 05/03/2016 15:25 Brianna A White



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Quality Control Summary

Group Number: 1656360 Client Name: Pace Analytical Services

Reported: 05/03/2016 17:07

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Result Analysis Name mg/l mq/1

Sample number(s): 8360691-8360692 Batch number: 16124941101A 10.0

Free Cyanide

LCS/LCSD

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 16124941101A	Sample numbe	r(s): 8360	691-8360692						
Free Cyanide	0.0400	0.0411			103		86-132		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 16124941101A Free Cyanide	Sample numb 0.0305	er(s): 8360 0.500	0.557	0.500	P360833 0.571	105	108	86-132	2	3

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/l	mg/l		
Batch number: 16124941101A Free Cyanide	Sample number(s): 0.0305	8360691-8360692 BF 0.0426	G: P360833 33*	20

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

^{*-} Outside of specification

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The unspiked result was more than four times the spike added.

10945 (1656360 (8360691-92

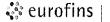
Chain of Custody -



Work	order: 92295907	Workorder Na	ıme:	Bremo Mon	thly Proces	ss		Resu	ılts Requeste	d 5/3/20	16	
Repor	t / Invoice To		Subcontra	ict To		Maria (1946)			Requ	iested Analys	ls	
Pace / 9800 I Hunte Phone	e Gastorowski Analytical Charlotte Kincey Ave. Suite 100 rsville, NC 28078 e (704)875-9092 : nicole.gasiorowski@pace	Eu 1abs com 24	rolins l 25 Ne	idministr Lancaste ew Hollar r, PA l	r Labs	Env.	15369	Cyanide	18-10-44			
Item	Sample ID	Collect Date/Tim) -	.ab ID	Matrix	TESS H		Free				LAB USE ONLY
1	T3-160502-1100-S3	5/2/2016	11:00 9	2295907001	Water	2		X				
2	T4-160502-1135-S3	5/2/2016	11:35 9	2295907002	Water	2		X				
3												
4												
5										<u> </u>	<u> </u>	
						18-16-22-16		351916	<u>Valoria de la Partición de la Carte d</u>	71.58%	Comments	
Trans	fers Released By		Date/Time		d By		Date/1	Time				
1	Karpel Bu	WIM-	5-2-14	160b								
2							<u> </u>		VAS	sample	-5	
3	The state of the s			1/20	Hoese		5310	1930		-		
Cool	er Temperature on Rec	eipt <u>(). '/</u> °C	Cu	stody Śeal	Y or (N)	Received	on Ice(Y) or N		Samples Intact	(Y) or N

FMT-ALL-C-002rev.00 24March2009

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Sample Administration Receipt Documentation Log

Doc Log ID:

145021

Group Number(s): 1656360

Client: Pace

Delivery and Receipt Information

Delivery Method:

Fed Ex

Arrival Timestamp:

05/03/2016 9:30

Number of Packages:

1

Number of Projects:

2

State/Province of Origin:

<u>NC</u>

Arrival Condition Summary

Shipping Container Sealed:

Yes

Sample IDs on COC match Containers:

Yes

Custody Seal Present:

No

Sample Date/Times match COC:

Yes

Samples Chilled:

Yes

VOA Vial Headspace ≥ 6mm:

N/A

Paperwork Enclosed:

Yes

Total Trip Blank Qty:

0

Samples Intact:

Yes

Air Quality Samples Present:

No

Missing Samples:

No

Extra Samples:

No

Discrepancy in Container Qty on COC:

No

Unpacked by Joseph Huber (7831) at 09:51 on 05/03/2016

Samples Chilled Details

Thermometer Types:

DT = Digital (Temp. Bottle)

IR = Infrared (Surface Temp)

All Temperatures in °C.

Cooler #

Thermometer ID 32170023

Corrected Temp 0.4 Therm. Type IR Ice Type Ice Pres

Ice Present?

Ice Container Loose Elevated Temp?

Ν

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2425 New Holland Pike Lancaster, PA 17605-2425

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T : 717-656-2300 F : 717-656-2681f 19 **000/1584** sterLabs.com



Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL N.D.	Reporting Limit none detected	BMQL MPN	Below Minimum Quantitation Level Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
С	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
μg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	μL	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an

as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank

C - Result confirmed by reanalysis

E - Concentration exceeds the calibration range

J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)

P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.

U - Analyte was not detected at the value indicated

V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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